R E M A R K S

Claims 7, 18, and 19 are amended. Claims 1-6, 8-17, and 20-22 stand as originally filed. Re-examination and reconsideration are requested.

In the office action, paper number (unspecified), dated December 1, 2004, (referred to hereinafter as "office action") the examiner rejected claims 1-11, 14-17, and 20-22 under 35 U.S.C. §102(e) as being anticipated by Ancin, U.S. Patent No. 6,721,458 (Ancin). The examiner objected to claims 12, 13, 18, and 19 as being dependent upon a rejected base claim, but indicated that they would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Re the Claims:

Claims 7, 18, and 19 are amended to correct minor typographical errors. No new matter is added by the amendments.

Re the Anticipation Rejections:

The examiner rejected claims 1-11, 14-17, and 20-22 under Section 102(e) as being anticipated by Ancin. These rejections are improper in that Ancin fails to meet at least the limitations of independent claims 1, 21, and 22 that involve using the image data for the first type of noise region to locate a second type of noise region. Therefore, none of the pending claims is anticipated by Ancin.

The Ancin reference is directed to image artifact reduction using adaptive nonlinear filters. Ancin discloses a method that comprises computing, for each of a plurality of pixels representing the document, a first average gray scale value of a first pixel neighborhood (e.g., a 3x3 neighborhood) and a second average gray scale value of a second pixel neighborhood (e.g., a 3x5 neighborhood). The method then compares the difference between the computed first average gray scale value and a value of that pixel with a predetermined threshold value.

Based on the result of the comparison, the method then applies a median filter to the first pixel neighborhood, a first low-pass filter to the second pixel neighborhood, or a second low-pass filter to the first pixel neighborhood to produce an output representation of the document with reduced artifacts. See, for example, the description provided in column 2, lines 40-51 of Ancin.

Method claim 1 of the present invention involves obtaining image data for a first type of noise region in a digital image and then **using** the image data for the first type of noise region to **locate** a second type of noise region in the digital image. Nowhere does Ancin disclose using the image data for the first noise region to locate a second noise region, as required by pending claim 1. Therefore, Ancin cannot anticipate method claim 1.

In rejecting claim 1, the examiner asserts that using the image data for the first type of noise region to locate a second type of noise region is met by Ancin at step 709 which is determined after the step 705 "no" decision. This mis-construes Ancin. Steps 705, 706, 709, 710, and 711 of Ancin's Figure 7 relate to Ancin's process of **comparing** the difference between the computed first average gray scale value and a value of that pixel with a predetermined threshold value in order to **select** the appropriate filter to apply to the two neighborhoods.

More specifically, and referring to col. 9, lines 29-55 of Ancin, step 705 determines whether the absolute difference between $\mu_8(i,j)$ (i.e., the average gray scale value for the first pixel neighborhood) and $p(i,j)$ is greater than or equal to a threshold value T_1. If it is, then step 706 applies the median filter to the first pixel neighborhood. If it is not, then step 709 is performed which determines whether the absolute difference between $\mu_8(i,j)$ and $I(i,j)$ is less than the absolute difference between $\mu_{16}(i,j)$ (i.e., the average gray scale value for the second pixel neighborhood) and $I(i,j)$. If it is, then step 710 applies the first low-pass filter to the second neighborhood.

If not, then a second low pass filter is applied to the first neighborhood.

In summation, then, steps 705 and 709 of Ancin are used to determine what type of filter to apply to the two pixel neighborhoods. Indeed, Ancin so much as says this in column 9, lines 1-5:

> "In accordance with this aspect of the invention, local document features are computed within the 3x3 and 3x5 neighborhoods. **These local features and predetermined thresholds are used to select the appropriate filter** to apply to corresponding document regions." (emphasis added)

Because steps 705 and 709 of Ancin are used to determine what **type** of filter to apply to the two pixel neighborhoods, not to **locate** a second type of noise region, as required by claim 1, Ancin cannot anticipate claim 1. It follows, then, that claim 1, and the claims depending therefrom (i.e., claims 2-20) are allowable over Ancin.

Independent claim 21 is not anticipated by Ancin in that Ancin does not disclose program code "for using said image data for said first type of noise region to locate a second type of noise region. . ." as required by claim 21. As discussed above, and contrary to the examiner's assertions, Ancin's steps 705 and 709 do not relate to using image data for a first noise region to locate a second type of noise region. Instead, Ancin's steps 705 and 709 are used to determine what type of filter to apply to the two pixel neighborhoods. Because Ancin does not disclose at least this limitation of claim 21, Ancin cannot anticipate claim 21.
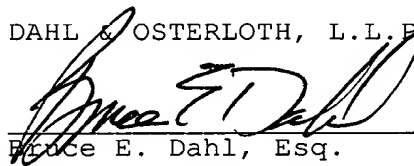
Independent claim 22 is also not anticipated by Ancin because Ancin fails to disclose "means for using said image data for said first type of noise region to locate a second type of noise region. . ." as required by claim 21. In his rejections, the examiner asserts that steps 705 and 709 meet this limitation. However, and as described above, Ancin's steps 705 and 709 are

used to determine what type of filter to apply to the two pixel neighborhoods. Consequently, Ancin cannot anticipate claim 22.

Applicant believes that all of the claims pending in this patent application are allowable and that all other issues raised by the examiner have been rectified. Therefore, applicant respectfully requests the examiner to reconsider the rejections and to grant an early allowance. If any questions or issues remain to be resolved, the examiner is requested to contact the applicant's attorney at the telephone number listed below.

Respectfully submitted,

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